

# BALI USV200

## Single-beam autonomous bathymetry



### Performance and Versatility

Hydrojet propulsion and single-beam sounder integrated into the hull  
Suitable for port areas, inland waters, lakes, rivers ... and for areas with very shallow depth (15 cm draft)

Large power reserve up to 10 knots (5 m / s)



### GEOD® powered

Manual and / or autonomous bathymetry

Real-time centimeter accuracy RTK

Integrated web server compatible with many software

Single Frequency (SF) and Dual Frequency (DF)

Stable platform with low draft and compatible with many sensors (ADCP, sidescan sonar, echo sounders...)



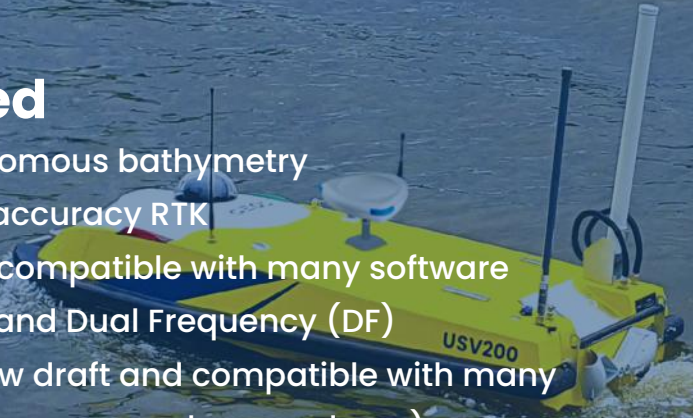
### Multi-applications

One surveyor can operate it

Ultra-resistant carbon fiber hull

Ideal for surveys of inland waters, ports, rivers...

Navigation safety, dredging control



BALI USV100 is a complete bathymetric survey solution, which is simple to operate and extremely accurate.

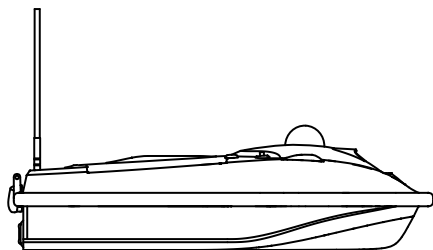
It comes with either a single frequency (SF) or a dual frequency (DF) echosounder for sounding up to 200 m with centrimetric accuracy.

BALI USV100's structure is made with fiber carbon which makes it easy to carry, deploy and operate by only one operator.

Robust and compact, USV100 can be used in any environmental and hydrological conditions.

## Technical characteristics

Positioning	GPS, Glonass, Galileo and BeiDou dual-frequency RTK (1cm) - SBAS (0.5m)
Sounding*	<ul style="list-style-type: none"> <li>450kHz frequency Range : 0,15m - 100m Accuracy : 0,2% of depth range or 2 cm Angle beam : 5°</li> <li>200kHz frequency Range : 0,4m - 200m Accuracy : 0,2% of depth range or 2 cm Angle beam : 9°</li> <li>30kHz frequency Range : 0,4m - 200m Accuracy : 0,2% of depth range or 2 cm Angle beam : 26°</li> </ul>
Radio communication	GSM Long-range UHF (403-473MHz) Wifi (2.4GHz)
I/O interface	Full system configuration Mission planning Real time monitoring Real time navigation Bathymetric data cleaning
Data format	<ul style="list-style-type: none"> <li>Position Latitude, Longitude, Altitude (WGS84) and XYZ</li> <li>Sounding Water depth (meter)</li> </ul>
Data output	NMEA0183
Software interface	Web browser (iOS, Android, Windows)



### Standard delivery

- 1 USV
- 1 rechargeable battery with charger
- 1 wireless base station
- 1 remote controller
- 1 BALI (smart antenna + echosounder)
- 1 360° camera
- 1 anti-collision system
- Navigation and autopilot software
- 1 transit case on wheels

### Optional delivery

- Additional batteries
- BALI stand-alone assembly kit
- ADCP, sonar side scan, ...
- Oceanographic winch with SVP or multiparameter probe
- Launching trolley

\*Other configurations available on request

\*\*Vacuum, without echosounder or inertial sensor

\*\*\*Additional option

### USV characteristics \*\*

Hull material	Carbon fiber
Dimensions	160 x 70 x 40 cm
Weight	32 kg
Draft	15 cm
Engine	2 hydrojets
Speed	5m/s max.
Endurance (speed 1 m/s)	From 10h to 12h
Remote controller range	1 km
Wireless base station range	2 km

The USV platform is compatible with a multi-beam system\*\*\*

